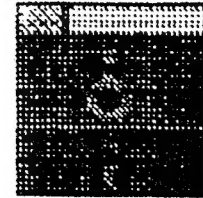


## BOB'S NOTEBOOK

by

Robert H. Mitchell, Willowdale Ontario



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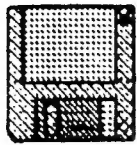
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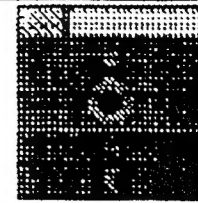
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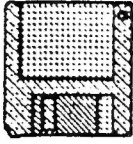
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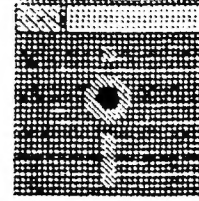
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Prepared by Bob Mitchell 920307

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8807 6/4 p.3 Bob's Notebook Disk Management Utilities Rename; Doctor; Copydog; Copy. Listings included for some of the above which are for the original version of LKDOS with 1960 bytes/track

8807 6/4 p.7 Game Hacks by Douglas Jeffery Also Game POKES by Renato Zannese

8807 6/4 p.8 PC8300 ROM Upgrade by Rene Bruneau. Also Addendum = a simple EPROMER and diagram for converting Junder Board to program the 52B13 EEPROM

8807 6/4 p.9 Larken RAMDISK for TS2068 Experiences of George Chambers

8807 6/4 p.10 Colour Printouts using VIC1520 printer/plotter John McMichael

8807 6/4 p.13 An ON/OFF switch for the QL by John Riley

8809 6/5 p.3 Bob's Notebook OPEN# CLOSE# Channels Streams. Listing to analyze these. Effect of Larken DOS on these

8809 6/5 p.4 Larken EPROM version 3 review by George Chambers

8809 6/5 p.5 Big Copy by Renato Zannese Makes a large shaded copy on a TS2040 in Spectrum mode

8809 6/5 p.8 Simple SOUND port wiring diagram and instructions by Renato Zannese

8809 6/5 p.9 Improved label maker for Larken by George Chambers Uses lprint.C1 by Hacksel

8809 6/5 p.10 LKDOS first impressions of version 3 by Bob Mitchell. Also listings for using Sequential filing system in v3 to convert a program listing to ASCII and load it into Tasword

8809 6/5 p.11 Pascal Disk Handler for LKDOS. by David Solly. More info available from George Chambers

8809 6/5 p.12 Vera Cruz on Larken; a game converted to LKDOS

8809 6/5 p.12 Larken RAMDISK experiences of George Chambers and Richard Hurd. Also a File Recovery listing by George Chambers

8811 6/6 p.3 Software Review Mscript v5.3 by Bob Mitchell

8811 6/6 p.4 Letters from our readers on Larken and Quad drives. Programming SIPs (Single Inline Plastic) package resistor network. Sequential Filing. Deeks. Etc

8811 6/6 p.5 Data Acquisition System for the QL

8811 6/6 p.5 Errata drawing for Larken interface originally in 8809 6/5

8811 6/6 p.5 Program to pick lottery numbers by Renato Zannese

8811 6/6 p.7 QL Beginners Section by Bill Lawson

8811 6/6 p.8 Hacker by Greg Robins Software Review

8811 6/6 p.8 Disk drive problem and cure (?) by Larry Crawford. Also Unusual disk drive problem and cure by Bob Mitchell and George Chambers

8811 6/6 p.9 Programming tips by George Chambers. Buried colour codes in listings. Switching between disk and tape saving and loading. Using more than one drive. Also: Scrabble and the Larken System

8811 6/6 p.10 Projects for TS Computers by Rene Bruneau. Number 1: Mini Mother Board

8811 6/6 p.11 Larken Disk Library. A proposal by George Chambers. Also: Larken RS232 Printer Driver by Larry Kenny; for use with Ed Grey's RS232C Interface Z-SI/O

8811 6/6 p.12 First class fonts (Byte Power) Review by Jeff Taylor

8811 6/6 p.12 Newsletter blurb by Jeff Taylor. A BASIC listing

8811 6/6 p.13 Tasword and the Larken Printer Driver by George Chambers. Tasword modified for Larken Version 3 EPROM.

1989
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8901 7/1 p.2 Editorial: new cover design; modems; Syncware alive

8901 7/1 p.3 History of TTSUG aka TTSUC aka Toronto Timex Sinclair Users Group/Club by George Chambers. Also list of magazine clippings available from George

8901 7/1 p.5 Bob's Notebook: Renumber to 10000+Tasort

8901 7/1 p.7 QL info by Bill Lawson super BASIC tips DEFine FUNction

8901 7/1 p.9 2068 and Power Supply by Larry Crawford London Ont. circuit diagrams and instruction details

8901 7/1 p.11 Modemming by G. Robins experiences in getting going

8901 7/1 p.11 RLE graphics examples from Jeff Taylor



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- 8901 7/1 p.12 Larken and the large printer by George Chambers. Using streams and channels to distinguish among screen, 2040 and wide printer
- 8901 7/1 p.13 Larken Disk Library being established. Summaries of: Larken Utilities; Doctor; Format Labels; Rename; Repair; Recover; Erase; Reader; Loader; Tape Save
- 8901 7/1 p.14 Mini-mother board by Rene Bruneau (continued from 8811 6/6)
- 8903 7/2 Out of town newsletter dated Jan 8, 1989. SNUG has a Larken Disk Library. He is Tim Wood of Vachon Island S/T Club. Toronto BBS has a Larken section and is called Phoenix at 416-458-5850. Ramdisk can be operated with a third AAA battery boosting the voltage to 4.5. Grand & Toy has a rack useful for holding disks: seven slots; costs \$6.75 more..
- 8903 7/2 Out of town news by George Chambers. JDR dropped their INWATS number for Canadian customers! Remote keyboard project on hold. Details on CNIB modems and \$145 RGB monitors. and much much more..
- 8903 7/2 Out of town newsletter. Sam's Photofacts has set of sheets on the TS2068: #CC19 Computerfacts. George can supply a copy (17 sheets). Bill Harmer has a document on using the ZX81 with Larken. Z88 users on the increase and a MacPack is available that allows data to be transferred from and to Mackintosh. QL repairs via Schennelly Stoughton, 191 William St. N. Lindsay Ont K9V 4B8
- 8903 7/2 p.2 Editorial: newsletter format: QL librarian is Hugh Howie; TTSUC is a member of SNUG-Sinclair North American Users Group
- 8903 7/2 p.3 Bob's Notebook. Printer and Drive Status Reports Details on putting data onto menus, etc. Also File loaded, Byte length and tracks used. Disk/Tape mode for Saves and Loads
- 8903 7/2 p.5 Larken Lines by Rod Gowan. Questions and answers. 1. Format and Move. 2. Sequential Filing. 3. Any new stuff? 4. Version 3 news. Larken Notes. Using channel 5 for wideprinter and channel for TS2040. Channel 2 stays as screen display. (by George Chambers)
- 8903 7/2 p.6 Info from Steve Gunhouse: Joysticks- use of OUT commands. Quad Density Drive. Conserving Memory tips. Plotting functions
- 8903 7/2 p.7 ZX81 MIDI project by Lou Champagne. Design and construction details in a series of articles starting with this issue. Diagrams included
- 8903 7/2 p.11 Larken Disk Library. George Chambers describes one of the disks in the library: Omnibus
- 8903 7/2 p.11 RLE Graphics by Jeff Taylor. RLE (Run Length Encoded) graphic pictures can be obtained on TS2068. Needed is a Modem which supports Xmodem protocol (eg, Maxcom by Larken). Also a BBS with an RLE section, many of the IBM boards will do. Finally, an RLE decoder (see TDM Jan-Feb 87) is available from the TTSUC library
- 8903 7/2 p.12 Wordsquare by George Chambers. Handles up to 60 words. Program in club library as tape #61
- 8903 7/2 p.13 Aligning Numbers by Mel Richardson. For ZX81 but would work on TS2068 too
- 8903 7/2 p.13 Hard Copy of MDV Cartridge used with QL
- 8903 7/2 p.14 Larken Tip on Disk Drives by George Chambers. Terminating Resistor
- 8903 7/2 p.14 Easy Keyboard Fix by Dick Wagner of CCATS. Used on TS2068 space bars where pressing right hand end does not make a space
- 8903 7/2 p.15 SNUG News Sinclair North America Users Group: 1. formed a public domain software library. 2. magazine plans being formulated
- 8903 7/2 p.16 Snodgits and the Larken System. Saving to Disk by G. Chambers. This is a game program; a who done it mystery. George describes how he saved it using the NMI button and the <A> key
- 8903 7/2 p.17 Larken Maxcom BBS Software
- 8903 7/2 p.17 RS232 Interfaces by Rene Bruneau. Definitions: RS232; serial vs parallel; centronics port; asynchronous. Also, using 32k memory chips to get 256k of bank switched memory--the cost is \$141.96 Can
- 8903 7/2 p.18 QLips by Hugh Howie. Tips for Quill, Abacus. Also a tip for marking clippings using a three hole punch
- 8903 7/2 p.18 Regulator for QL. by S. Stoughton Lindsay Ont. with diagrams
- 8903 7/2 p.19 Bill Lawson writes a column of tips etc for QL users
- 8903 7/2 p.20 Member J Vander Stel writes some tips when using the TS2068. INKEY\$; PAUSE 0; etc
- 8903 7/2 p.21 Technician Ted and the Larken by G. Chambers. Some thoughts on an old game. Also a book to read called <Mismatch by Lloyd Pye>. System 15000 on the Larken Disk System: another game with some deep thoughts
- 8903 7/2 p.23 EMY Extn basic Multi-tasking for Spectrum modified by R. Zannese
- 8903 7/2 p.24 A mod for the 2050 by Rene Bruneau. One chip used to generate a 10v supply

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- 8903 7/2 p.27 A speshul hear this report for QLers from Hugh Howie
- 8905 7/3 p.2 Editor's Remarks CATS Fest; Newsletter; QLers Note Non-Canadian Readers Note
- 8905 7/3 p.3 Bob's Notebook Printing Disk Index on wideprinter in condensed font. Mscript Sort Utility.  
Change of line spacing crams more print lines onto one sheet of paper
- 8905 7/3 p.5 Modifying Artist II for Larken TT 7/3 p 5 by Renato Zannese
- 8905 7/3 p.6 QL News by Bill Lawson RGB monitor adjustments etc; Tip re using Keyword LIST to get a hard copy of a listing
- 8905 7/3 p.7 Larken- Cracking Spectrum Programs by Geo Chambers Two utilities to simplify the process
- 8905 7/3 p.7 Z88 User Group Magazine EPROM put out by UK club
- 8905 7/3 p.8 Interface for RAM in TS2068 I/O Ports by Larry Crawford Bank switching; EXROM; Chunks: Expansion Banks; diagrams
- 8905 7/3 p.9 Care and Feeding of Disk Drives Review of two manuals by G.Cary. Disk Service Manual III and Disk Drive Tutorial both by John J Williams MSEE
- 8905 7/3 p.10 QL Tips by H Howie Slow down hints at shortage of memory. Other tips, too
- 8905 7/3 p.11 Predicting Lunar Eclipses on the ZX81 by Mel Richardson including the listing and an example
- 8905 7/3 p.11 A Novelty Program for TS 2068 Puts a title on the screen at top left corner. By David Solly
- 8905 7/3 p.13 Digital Clock from SIN newsletter translated from the French by Louis Laferriere
- 8905 7/3 p.14 Product Info Surge Protector \$6.50 US3 1/2 " Disk Drive \$60 US5 1/4 " Disk Drive \$50 US DSQD addresses included
- 8905 7/3 p.15 RLE Graphics by Rene Bruneau Product Review of TEC 200 Film. Can be used for PCBs
- 8905 7/3 p.16 Software Review of Larken Sequential/Random File Utility. By Bob Mitchell
- 8905 7/3 p.16 Wordwrap by Steven Gunhouse
- 8905 7/3 p.17 LKDOS advertisement Maxcom; Disk Editor; Sequential Random Access Files; Coming soon: Desk Top Publisher; Spell Checker
- 8905 7/3 p.18 CATS Computer Fest 1989 Review by G. Chambers
- 8905 7/3 p.19 Playing with sound For QLers by Senen Racki
- 8905 7/3 p.20 Excerpts from other newsletters by G. Chambers: Non-flashing prompts (Gunhouse); Larken Ramdisk bug alert (Earl Dunnington); CRC ERRors (Chambers); MODEMs (Chambers)
- 8905 7/3 p.21 Time Designs Magazine. Will it survive? Where is it? News by Geo Chambers
- 8905 7/3 p.21 Bob's Notebook Jumping Backwards Relatively Speaking. Listing to make a table of jumps
- 8905 7/3 p.22 Larken Disk Library Disk 4 Astronomy Disk 5 Music and Sound Disk 6 Adventures by G. Chambers
- 8905 7/3 p.22 Larken Disk Drive Info by G. Chambers; copy available for \$2 incl post
- 8905 7/3 p.23 VAL for QL by Senen Racki compares with 2068 method
- 8905 7/3 p.24 Larken Product Info LKDOS Extended BASIC Cartridge 400K 2068/Spectrum Disk Interface DSK 400. 256K Ramdisk Kit
- 8907 7/4 p.2 Toronto BBS for TS users: TIBM WIZARD BBS 743-6703; 300 RLE files. Message service
- 8907 7/4 p.5 Insomniac Electronics Update. Slow orders
- 8907 7/4 p.5 Larken Index. B1A printer fix. By Chambers: Some POKES to adapt code to different printers
- 8907 7/4 p.5 Tip by Mel Richardson on saving magazines using plastic sleeves
- 8907 7/4 p.6 Latest from SNUG
- 8907 7/4 p.6 RAMDISK to DISK Backup by Larken. Different approach to R. Hurd's
- 8907 7/4 p.7 QLIPs. Tips for QLusers. Also Spreadsheet keypresses reduced by listing from Real Gagnon
- 8907 7/4 p.8 SCREEN\$ copy by Renato Zannese: double strike, 7 widths and 4 heights
- 8907 7/4 p.9 Amazing Digi-Dubber by Fred Nachbaur. Details on how to copy ZX81 tapes
- 8907 7/4 p.11 QL Cures by Bill Lawson. Dealing with crashes
- 8907 7/4 p.14 LKDOS Tools by Bill Jones Update Magazine
- 8907 7/4 p.17 Trip to England notes by Geo Chambers. Also Larken Disk Library Notes and comments on our newsletter
- 8907 7/4 p.18 QL Battery Backed Clock and some books available for QL
- 8907 7/4 p.19 QL and RGB Monitor by Pierre Goudet
- 8907 7/4 p.20 Hacker's Haven Pt 2 ZX81 and MIDI interface project by Lou Champagne
- 8907 7/4 p.24 Fastext 80 Crib Sheet by Bob Mitchell
- 8907 7/4 p.24 Data creator from ZX Computing 2/86 mod by S. Gunhouse
- 8909 7/5 p.3 Bob's Notebook. Make a calendar

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8909 7/5 p.6 QL utility to provide accents for vowels in French text. By Real Gagnon translated by Louis Laferriere

8909 7/5 p.7 ZX81 Digi-Dubber revised schematic by Fred Nachbaur

8909 7/5 p.8 Letter from R. Hurd on 3-1/2drives; MODU connector; Quad to DSDD utility on update disk provided to club

8909 7/5 p.9 TSMON: a direct video output circuit for TS1000 by Chuck Kereluk

8909 7/5 p.10 MODEM notes by L. Laferriere; also assistance among club members a major benefit; QL notes on SuperBasic and QL DOC copies

8909 7/5 p.11 LKDOS Disk Utility Double to Quad by R. Hurd. Converts a DSDD disk to Quad for those without standard 5.25"drive

8909 7/5 p.12 Renaming an LKDOS disk by Geo. Chambers. This explains how to use Disk Doctor to change the title on a disk

8909 7/5 p.13 Programming the TS2068: Opening Larken Sequential files

8909 7/5 p.13 QLIPS by Hugh Howie. Some notes on Abacus and greedy Psion Four QL SS

8909 7/5 p.14 Aerco LKDOS system. CALLs to LKDOS ROM listed by Steven Gunhouse

8909 7/5 p.17 Full Window Directory for QL by Mike Ferris

8909 7/5 p.20 Bob's Notebook. A Pixel Print demo column

8909 7/5 p.20 TIBM Wizard BBS info

8909 7/5 p.21 HI-REZ Graphics Dump by Rene Bruneau. For ZX81/TS1000

8911 7/6 p.03 Bob's Notebook Another Disk Rename routine for LARKEN LKDOS users. Listing & explanation.

8911 7/6 p.05 Larken news by Geo. Chambers. X-Y-Z CAD-CAM drilling/routing requires RS232 interface. LARKEN ELECTRONICS.

8911 7/6 p.05 Some excerpts from VISTA newsletter 3/4 including: Russell Electronics, Maxell Amdisk III disks, Disks in bulk lots (cheap), Books on servicing drives, printer & plotter repairs, ribbon re-inking, RMG Enterprises goodies.

8911 7/6 p.06 QL Library by H. Howie. Notes re RGB monitors vs TV with QL. Also problems with 512 expansion and program for unexpanded QL. Programming QL to get rid of bugs Plug for Update Mag. Also one QLIP same page.

8911 7/6 p.07 Pixel Print Plus 3 Column modification by Steve Spalding. Z88 ad by Sharp's.

8911 7/6 p.08 TS1000 Video Driver by Rene Bruneau. Gets rid of Crawlies on VHF TV. Circuit diagram & details

8911 7/6 p.08 Index. B1A printer fix by Geo. Chambers. Also some ads by Ed Grey for LARKEN, Specterm, Z-SI/O and MAXCOM. Ed also has modems & printers.

8911 7/6 p.09 Hardware Review on Data-Skip Videoface by Dan Pinko. Does a SCREEN\$ SAVE of a TV or VCR frame. Costs \$93 US. From Gouda Holland.

8911 7/6 p.10 Ad for OKIMATE TS2068 printer. Two workshop hints from Larry Crawford. Grounding Strap made for less than \$5. How to make a fine soldering iron tip from 12 gauge wire

8911 7/6 p.11 Ads from Byte Power marketing software for TS2068 and Spectrum LARKEN MAXCOM, Disk Editor and Random/Sequential Filing. Also an LKDOS Share-ware disk which requires original programs to work: Art Studio, Specterm, TASWORD. Mike's QL Hot Tips from TDM Magazine. RMG Catalog on LKDOS disk.

8911 7/6 p.12 QLIPS by Howie. Multi-tasking: requires you have Task-Master. Also an ad from Bill Cable for QL software DB Tutor which uses Archive

8911 7/6 p.13 NEC FD1035 Disk Drive Review by Richard Hurd. Tips on connecting it to TS2068. Also notes on Fujitsu drive and Compower 130 watt power supply for \$12 US. Addresses given.

8911 7/6 p.14 Excerpts from Steven Gunhouse letters by Geo Chambers. AUTOSTART and Joystick not compatible; fixes given. Using joystick as a mouse. Interrupt Modes IM1 and IM2 are explained.

8911 7/6 p.16 Bob's Notebook gives two cards from his Cardex file: on LARKEN Graphics characters and Profile keyboard legend.

8911 7/6 p.17 More ads on Graphics, QL software, Printers, Computer repairs/upgrades etc. Graphit Software. U S. Tax Return software from Herb Bowers Sr. ZEBU utilities inc. Fast DELETE key and Restore EDIT line at any time. Hi-Res Plotter.

8911 7/6 p.17 Ads for Graphics A to Z for ZX81 TS1000 & TS1500. QL software: Mailbag, Tax-I-QL, QLANDLORD. Printers from RMG Enterprises. Repairs to printers computers, monitors. Graphit software for

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TS2068. US Tax Return program. ZEBU software makes DELETE key faster, restores EDIT line anytime, etc. Hi-Res Plotting.

8911 7/6 p.18 Print Factory review by Tom Skapinski from Byte Power. Generally favourable. QL Printers and QUILL from SMUG Jul 89 issue by Geo Chambers. TIMEX Computer fest 1990 to be held June 1-3 in Holiday Inn Waukesha, Milwaukee area.

8911 7/6 p.19 Disk Drive Repairs by Don Lambert. a must for those interested in doing their own.

8911 7/6 p.20 The low down on Time Designs Magazine. A real tear-jerker.

End of Part 2 of 3 parts.

This file, comprising 17 pages, can be provided on an IBM compatible disk in Word Perfect 5.1 format or straight text format. It could be downloaded to a TS 2068 on request.

Bob Mitchell 920307.





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prepared by Bob Mitchell

1990

9001 8/1 p.04 Bob's Notebook Tas>MS Loader converts TASWORD text to MSCRIPT. Programs are loader tas>ms.Bb and compiled code tas>ms.Bb. Later versions are tas2ms.Bb & tas2ms.Cc. This utility was subsequently superseded by Steven Gunhouse's machine code version: program names are Tas>MS.Bm and the code Tas>MS.CM.

9001 8/1 p.06 COLOUR COPY onto cloth by John McMichael. p.07 Add a BEEP to ZX81 keyboard key presses by Rene Bruneau. p.08 QLIPS static problems by H. Howie. p.09 Computer Repairs R Zannese p.09 LARKEN Printer driver for a serial port. By Larry Kenny.

9001 8/1 p.10 Microdrive Spotting. p.11 Networking with QL translated by L. Laferriere. p.13 Video Digitizer by J. McMichael. p.14 QL Section News by H. Howie p.15 TS1000 Video Driver Update to 8911 article by R. Bruneau.

9001 8/1 p.15 RLE file "Lovely Lady" download-ed by Jeff Taylor from TIBM Wizard BBS 416-743-7603. p.15 Wanted: One-liners. p.16 QL useful POKES. p.16 For Sale items by Zannese.

9001 8/1 p.17 Bob's Notebook playing with colour.

9001 8/1 p.18 MODEMS for MODERNS. Report on Nov 8 89 meeting at J. Taylor's. p.19 Turtle Graphics by Timothy Swenson. p.20 2068 Fix for Star NX-1000 using AERCO Centronics I/F. By Richard Hurd. Apparently no similar problem using Hacksell board.

9001 8/1 p.21 SINing and Filling on TS2068 by Joel Brody. Trig functions put to use. p.21 Confused about fonts? By Mike Felerski. Gives details on loading fonts and doing the necessary POKES. p.22 LARKEN RAMDISK at Kennedy Space Center by Les Cottrell p.22 DEF FN Command. How to use.

9001 8/1 p.23 Some add-ons available for 2068 are described: Weather Station Real Time Clock 32K RAM Expansion Chip Tester and Logic Monitor. ZEBU extra BASIC utilities. CADZ designing utility. PINS i/c pinout directory. CHIP i/c inventory program. Assembler TASWORD with 256K Aerco disk. OS DRAW for mdv and OS64. ZUNK Custom Electronics

9003 8/2 p.03 Bob's Notebook Header Reader Loader and BASIC for compilation p.14 Terminology using Pixel Print for the article.

9003 8/2 p.05 QL utility to change disk name .By Real Gagnon and provided by Louis Laferriere. p.06 QLIPS revised from last issue. By H. Howie. p.07 Penetrator 2068 game. Modification details for LARKEN. p.09 LEFT CENTRE and RIGHT Justification routines.

9003 8/2 p.10 MODEMS available from Telecom Canada (Bell). p.13 Spectrum Motherboard for use with TS1000 and TS2068 too.

9003 8/2 p.11 Printer Prose. By Lionel Keeping. Problems using a Tasman interface with LARKEN EPROM. p.12 Les Cottrell shows how to load TASWORD files into MSCRIPT and vice versa; how to save disk space when saving NMI SCREEN\$. Another use for NMI-F: PAUSE. Do not use OPEN\$4,"dd" when line0 contains m/c. Autoboot NMI-F loads any AUTOSTART in selected drive.

9003 8/2 p.15 MIDI on QL by Senen Racki. p.16 Other uses for RAMDISK. By Larry Crawford. Treatise on Bank Switching, running an AROS, etc. p.18 Trivial Pursuit game on 2068. p.19 Ads by LARKEN, SHARPS and Byte-Power.

9003 8/2 p.20 QLIPS by H. Howie. p.21 Videotex ad. p.22 SMUG Exposition Ad. p.23 TTSUC LARKEN Disk Library Listing.

9005 8/3 p.02 Editorial: membership extension on a one-time basis; all current memberships extended by six months. Tip re power supply generating RF which hampered disk operation on TOS system. Larken utility to read MSDOS disks and stores text in

Mscript files. Use of Commodore mouse 1351 in Kempston joystick port. Note on Byte Power's Print Factory.

9005 8/3 p.04 Bob's Notebook on printing Timachine output onto wideprinter using LKDOS SEQ filing. Saving Profile text to a Seqfile. Using PROFILE to make address labels in elongated characters. Fixing a problem with TSTK Toolkit variables listing.

9005 8/3 p.05 Larken NMI-F AUTOSTART MENU Code is buried in Autostart program and loaded into LKDOS RAM using LDIR routine. Buried means using spare area 24311 up to 24989 or so. Code listing and disassembly given. This utility developed by George Chambers/Bob Mitchell.

9005 8/3 p.06 Scuttlebut by Hugh Howie. SMUG Computer Expo June 1-3. News of new laptop by Sir Clive. Cambridge North America going bankrupt? RMG Enterprises stops supporting Z88; only SHARP'S left. Time Designs being resurrected?

9005 8/3 p.07 QLIPS by Hugh Howie. Clarification re QL not multi-tasking under TASKMASTER. This provided by EMSOFT (PeterHale) who offers help re QUILL.

9005 8/3 p.08 Transferring MSDOS text files to the TS2068 by George Chambers. Full details on how it was done and program listing.

9005 8/3 p.10 SMUG Video Digitizer. Using a camcorder etc to capture a TV screen onto the TS2068.

9005 8/3 p.11 Letter from Cameron Hayne on Timachine problems etc.

9005 8/3 p.12 The C Page by Timothy Swenson. Used with UNIX. For use with QL. QL Colour Demo. QL utility to switch between TV mode and Monitor mode.

9005 8/3 p.13 Family History and the ZX81 by Philip Hudsmith. For genealogy fans.

9005 8/3 p.15 RGB Monitors and TS2068. By George Chambers. Notes on Printer Ready checks for wide printer. By Louis Laferriere.

9005 8/3 p.16 Letter from Larry Kenny. Camtool discussed. Spell Checker and Desk Top Publisher still under development. Use of LKDOS DRAW command to do bar charts; clear partial screens; making backgrounds for title screens etc. DRAW also used as paintbrush. Use bank switching to switch programs. Plus other plans??

9005 8/3 p.16 QL\_DOC by Louis Laferriere. New ROM Minerva available from Real Gagnon Montreal.

9005 8/3 p.17 More QL news and hints from Hugh Howie. Networking tips. QLIPS: A friend in need in Texas Circles: a small QL listing.

9005 8/3 p.18 Bob's Notebook: Bank Switching. A beginner's view of this complex aspect of TS2068 programming.

9005 8/3 p.19 Letter from Steven Gunhouse. Topics include: Justifying text; Opening Larken extra channels; Bank-switching thoughts; Finding a string in memory.

9005 8/3 p.23 Call for Inputs. ZX Appeal Sinclair Computers User Society Quantum Levels ISTUG Harrisburg Area TSUG. The Plotter. SMUG. All this from Hugh Howie.

9005 8/3 p.25 Mike's Notebook by Michael J. DiRienzo. MACRO a program to use the IM2 Mode to make Function Keys. Cross Ref to Sinc-Link 85/09 p.06

9005 8/3 p.26 Tech Draw Jr. and Larken by George Chambers. Saving Screens to Disk Listing and disassembly.

9005 8/3 p.28 QLIPS by H.Howie More Networking items. Problems with QUILL. Need for extra memory.

9005 8/3 p.29 Videotex Digitizer Software Review. with pictures.

9005 8/3 p.30 Description of Wordmaster from ZXAPPEAL .My personal note Wordmaster will not work with any printer that does not provide left margin adjust or printer reset commands. (RHM)

9005 8/3 p.31 Minix on the QL by T. Swenson. A Unix like operating system.

9005 8/3 p.32 LKDOS input from Bill Jones. Using LKDOS PRINT with <A\$files> Simulating NMI autoloads. Saving an AUTOLOAD program. What to include in an autoload program.

9005 8/3 p.33 Pixel Printing page. Sinclair Desktop Publishing Journal. by Mike

Felerski. Also news from Byte Power's Print Factory.

9007 8/4 p.03 Bob's Notebook: Bank Balances: a listing.

9007 8/4 p.05 QL Try-It by H. Howie. disappearing cursor and dump to printer.

9007 8/4 p.06 File name misconceptions for the QL. Basic Filenames. Psion Filenames. More Psion Tricks.

9007 8/4 p.08 Letter from S. Gunhouse Math stuff re DEF FN and use of VAL and VAL\$.

9007 8/4 p.10 Wordmaster: A review. By Lionel Keeping. File Handling File Options Command Lines Graphic Printing Headers and Footers Print Options

9007 8/4 p.13 File Header Reader for Larken TS2068 by George Chambers. Full details and listing. Correction re Ramdisk from Larry Crawford re AROS. Mod to Pixel Print from Andrew Zettel. Icon Library info for Pixel Print Plus and Professional.

9007 8/4 p.15 ICON Library Manager User Guide.

9007 8/4 p.16 Improving the TS1000 by Rene Bruneau. Basic Mods. Memory and Display Peripheral Devices.

9007 8/4 p.17 The C Page by Tim Swenson. A short program.

9007 8/4 p.18 The QL Library continues to grow. From H Howie the librarian. QL News Chaos Buster by Louis Laferriere. Random Blocks: a tip for QL with a listing. CQ QL SOS. Problem from Robin Beaumont Yellowknife.

9007 8/4 p.20 Letter from S. Gunhouse. TAS>MS converter. By my test, this works very well. (RHM). Source Code provided and DATA lines of machine code. Fastext 80: getting NLQ really cheap.

9007 8/4 p.23 TS2068 ROM Disassembly: How it can be done. by Bob Mitchell.

9007 8/4 p.26 PIE Charts and Machine SCREEN Dumps by Warren Fricke.

9009 8/5 p.03 Bob's Notebook Making Graphs with Larken LKDOS Version 3. Pixel Print Professional used for page.

9009 8/5 p.04 PSI CHESS AND LARKEN By George Chambers How to convert this tape program to disk.

9009 8/5 p.06 Q LIPS Bits and Pieces Write Protect Tabs Removable Disk Labels. Disk drive problems. Missing QLs. Update slow delivery. New software in club library.

9009 8/5 p.07 ZX81 tape library by George Chambers. Utilities to overcome tape loading problems and to copy a tape that starts running after the load is complete.

9009 8/5 p.08 Former Cambridge Salesman tries database for mail orders: Nigel Searle's company is The Marketing Clinic. Hints and Tips on QLs by E.P.Wannum. SCREEN saving; DIR command.

9009 8/5 p.09 QUILL and Toolkit\_2 by Hugh Howie. Loading problems.

9009 8/5 p.09 ZX81 Multiplication Accuracy by George Chambers Also: Printer Ink source.

9009 8/5 p.10 Plotting Charts and Curves by Warren Fricke.

9009 8/5 p.11 Multiplication by George Chambers. Russian Peasant Multiplication.

9009 8/5 p.12 Imagix by Emanuel Verbeeck. Gives superior but slow graphic images.

9009 8/5 p.14 The Print Factory: a review by Jeff Taylor. Available from Byte Power.

9009 8/5 p.15 Cumana Interface by Louis Laferriere. Problem and repair details.

9009 8/5 p.16 Larken Disk Editor A review by Les Cottrell done on PPP (Pixel Print Professional).

9009 8/5 p.17 Keyboard Interface for TS1000 & TS2068 by Rene Bruneau. Full details on how to add an external keyboard. Hardware project with drawings.

9009 8/5 p.20 Quebec Link for QL users by Real Gagnon. TS2068 section, then QL Public Domain & Shareware. Clive strikes back. QL programming tip. Tetris for QL.

9009 8/5 p.21 The C Page by Timothy Swenson. Input/Output in C. Reverse side on p.22 very poorly printed.

9009 8/5 p.23 Bob's Notebook 900708 LKDOS Printer exercise. Lubrication and ribbon re-inking

9009 8/5 p.24 Chaos Game by Bob Warner.

9009 8/5 p.25 TS2068 Morse Code Generator by Steven Gunhouse. Directory to Printer

for QL. By Butch Weinberg.

9009 8/5 p.26 Phone inventor never dreamed of ALEX. Copied from Toronto Star.

9011 8/6 p.02 How to read/print a Help file. By G. Chambers. Correction to PCB layout for Keyboard Interface in last month's issue.

9011 8/6 p.03 Z80 Dictionary of Instructions based on Toni Baker's book for ZX81. By Bob Mitchell via PPP.

9011 8/6 p.07 QL Library report for 1990 by H. Howie.

9011 8/6 p.08 Q LIPS by Hugh Howie. Need for course on Super Basic programming. More from the QL Library. Changing Disk Name.

9011 8/6 p.09 The C Page from last month reprinted for better clarity.

9011 8/6 p.11 Larken Maxcom: A review by Greg Popovich. BBS section gets rave from writer.

9011 8/6 p.13 text87: a review by Hugh Howie.

9011 8/6 p.15 How to save NMI-type files from disk to tape. By Steven Gunhouse.

9011 8/6 p.18 Some graphics done via PPP using fonts from Wordmaster. Problems using Fastext 80 with Wordmaster.

9011 8/6 p.19 Hints for Timex/Sinclair users by G.A.Smith taken from Computer Shopper Sep 88.

9011 8/6 p.21 BBS Software by Larken Sir Clive's Castle BBS. Ottawa Ont (613) 835-2680 Sysop Michael Dove Hardware David Solly SIGs/Library Pascal Programming SIG.

9011 8/6 p.23 Quebec Link. By Real Gagnon. Default device on QL. QL Tip: loading machine code. CSIZE special effects.

9011 8/6 p.24 JSU SCREEN modes by Howard Clase. QL info.

9011 8/6 p.25 Keyboard Overlays. By Les Cottrell. PPP still alive: Mike Felerski's Desktop Publishing Journal will appear in Update.

9011 8/6 p.27 Game review: King's Keep by Jeff Taylor.

9011 8/6 p.28 The C Page by Timothy Swenson. Accessing files.

9011 8/6 p.29 QL notes from Hugh Howie.

9011 8/6 p.30 QL Hardware Library by Howie.

9011 8/6 p.31 Service Charges for Sinclair Timex computer eff Jan 1991. Where to get supplies.

1991

9101 9/1 P.04 Bob's Notebook Odds & Ends Disk name garbage Check printer ready Printing a pound sign Bug Alert! LK2CPY.B1 (R. Hurd) Bug Alert! INDEX.B1 (Mitchell)

9101 9/1 P.06 November 90 meeting of QL wing. Demos on Chaos Buster, Networking, text87, IMAGIX, Modifying and cleaning up archives files. Report by Louis Laferriere.

9101 9/1 P.07 Changing Tasword II Help Page by Dick Wagner. Detailed steps given of this and cross reference to a Time Designs method in Vol3 No 2 pages 26-29.

9101 9/1 P.08 Data Read Restore on TS1000 by Sebastien Boivert.

9101 9/1 P.10 Software Review: PIX-FX by Chuck Kereluck. Graphics program by Michael DiRienzo for TS2068. Available from VectorWare4128-1/2 California Ave SW Seattle WA 98116 for US\$20

9101 9/1 P.12 QL programming tips by Howard Clase NFLD. Structured Programming - Clase's Rules.

9101 9/1 P.15 Power Glitches by H. Howie. Crash problems with QL.

9101 9/1 P.16 LKDOS utility--print a CATalogue by Thomas Skapinski. Added cautionary note by Geo. Chambers.

9101 9/1 P.18 text87 My Latest Impression by Hugh Howie. A further review of this QL word processor.

9101 9/1 P.19 Steven Gunhouse comments on the mathematical routines printed in the Sep/Oct 90 Sinc-Link.



9101 9/1 P.21 Sincus Light Pen for TS2068 by Wes Brzozowski. A hardware project for Graphics buffs.

9101 9/1 P.23 Digitizer problem. Notes from Marty Miller.

9101 9/1 P.24 The C Page by Timothy Swenson. A version of the UNIX utility wc (word count) which reads in a text file and counts lines, words and characters.

9101 9/1 P.25 Timex Sinclair Resources by Rene Bruneau who is assembling a binder with many ZX 81 articles collected over the past 5 to 6 years. Many are hardware oriented and some apply to the TS2068 also. Tip on Static Electricity around your computer.

9101 9/1 P.26 Stepping Rate Fix for LKDOS. By Bob Swoger of Chicago Area Timex UG. Listing provided with mod by George Chambers.

9101 9/1 P.27 Mike Di Rienzo's notebook A lotto number generator for the TS2068.

9101 9/1 P.28 <sup>Les Cottrell</sup> provides a review of Byte-Power's Disk Utility Software: various COPY routines, coloured disk names, name thief transfers a disk name from one disk to another, Hello! a very useful boot utility especially when installed in Ramdisk, Tiny Boot, Format disk which maps out bad blocks, sort catalogue, clean up disks, block analyzer, fast disk clean up and a file analyzer.

9101 9/1 P.29 More MIDI for the 2068 by Richard Hurd. MIDI Interface, recap, alternatives and sequencing. Synthesizers.

9101 9/1 P.31 ZX81 Lottery Fun by Mel Richardson. A listing to type in.

9101 9/1 P.32 Quebec Link QL notes from Real Gagnon.

9101 9/1 P.33 QL Hardware notes from Hugh Howie. Also SuperBasic Instruction.

9101 9/1 P.34 PIX FIX review by Chuck Kereluck Do not confuse with PIX FX. This one creates graphics while PIX FX manipulates them.

9101 9/1 P.36 Character Set Editor by Bob Mitchell. This allows entire sets to be rotated as well as defined. Listing given for reader to enter.

9101 9/1 P.41 Three keyboard overlays: HOT Z, Profile Plus 5A, Pixel Print Professional.

9101 9/1 P.44 Software Review by Jeff Taylor COLOR 2 GREY changes a SCREEN\$ to a grey scale for better printing on the wide printer. Good example shown.

9101 9/1 P.45 A new computer use from SMUG.

9101 9/1 P.46 Archive Files (QL) by H. Howie How to rename or change or add a field.

9101 9/1 P.47 More RESPRing from Howard Clase in Nfld. This for QL wing.

9101 9/1 P.48 Letter from Steven Gunhouse with a Tasword text compressor.

9103 9/2 p.04 Demographic map of NorthAmerica showing concentration of TTSUC members as of Sep 90. prepared by Hugh Howie.

9103 9/2 p.05 Bob's Notebook. slink and slink2 Profile files kept current and passed to club library; slink is short for Sinc-Link Newsletter; the two volumes act as an index of key articles. Users can add to them if not enough detail is shown. Profile changes to allow left & right column printouts; also CAT and Fullcat incorporated. Interaction between files can cause problems.

9103 9/2 p.07 QLIPS by Hugh Howie. Hacking much more difficult than on 2068 or ZX81. Some drawbacks and advantages over PCs given by Bill Cable.

9103 9/2 p.08 Disk Menu Maker by Larry Crawford based on earlier menu by George Chambers and Bob Mitchell. This is the listing only. See p.20 for the details.

9103 9/2 p.09 ZX81 games notes by Ron Campbell

9103 9/2 p.10 Letter from Steven Gunhouse. A complex method of packing telephone numbers into fewer bytes.

9103 9/2 p.12 The Quebec Link by Real Gagnon. Calling an external machine code routine to complement the Archive programming language.

9103 9/2 p.14 Mike's Notebook. A routine to compress a SCREEN\$. Very efficient at reducing byte length to below 5k. Decode routine is saved with each compressed SCREEN\$ to make reloading simpler.

9103 9/2 p.15 QL Meanderings and One-liners by Hugh Howie.

9103 9/2 p.16 Software Review--Omnicalc. A spreadsheet alternative to Vu-Calc. Drawback is that no LKDOS load and save routines built in. However, NMI save comes to the rescue. Benefit is that larger numbers can be accommodated than in Vu-Calc. Many other good features make this a good buy.

9103 9/2 p.18 TS2068 Computer Repairs. Much needed info on a reliable repair shop.

9103 9/2 p.19 ZX81 -- TS1000 news by Jeff Taylor. High Resolution pictures.

9103 9/2 p.20 2068 Larken Disk Menu Maker by Larry Crawford. Full details for the listing on p.08 in this newsletter. Finding the active drive. Adding Taswide. Getting rid of unnecessary lines Autostart Save. Finding the Disk Name. Data Statements. Operation. Using the Menu Maker. Using the Disk Menu.

9103 9/2 p.21 Line Delete for Spectrum. If you program in Spectrum, this is a time-saver.

9103 9/2 p.22 QL: Some popular misconceptions. BASIC Filenames. Psion Filenames More Psion tricks. All this from Howard Clase

9103 9/2 p.24 ZX Resources by Rene Bruneau. A parallel interface using theZ80 PIO chip by Zilog. Hardware project with diagrams.

9103 9/2 p.27 ZX81/TS1000 Printer tip How to COPY a block of lines onto the printer. Also the listings for the DATA READ RESTORE feature for theTS1000. See 9101 9/1 p.08 for the article. All this from Sebastien Boisvert

9103 9/2 p.28 TOS System repair. TOS = Timex Operating System; also known as the ZEBRA DISK system. Jack Dohany is source for the PLA chip used in this system. PLA = Programmable Logic Array.

9103 9/2 p.29 How to Squish a Disk. Details on the simple procedure for defragmenting a disk are given. Wordmaster tip on this page which helps save disk space.

9103 9/2 p.30 QL -- LAN or Local Area Network. by Hugh Howie. LAN = Networking in QLingo. Also an article on Format to 894/900 sectors.

9103 9/2 p.31 Letter from Steven Gunhouse. Correcting error in Swoger's article on changing stepping rate of drives. A routine to get BIT 3 of a byte when checking printer ready status. Clean Screen tip from Steve Dempster to prevent a loading message from spoiling the SCREEN\$ display.

9103 9/2 p.34 Imagedit. A way to combine two SCREEN\$ in one. Listing from Your Computing Apr 1985 p.135. Also, Alfa-Bytes News #1: a list of mnemonics (?) you may never have seen.

9105 9/3 p.04 Bob's Notebook Programming Tips Alternate to NMI button plus FKey. Plus: Profile warning; Printer Control Codes; Keyboard Idiosyncrasies.

9105 9/3 p.06 Software release from Wood and Wind Computing. For QL: QLERK a powerful accounting program. \$75.00 for 2 disks. Archive based. Bill Cable Cornish NH USA

9105 9/3 p.07 QLIPS: getting rid of garbage. By Hugh Howie. List1 and List2 explained. Turtle Graphics.

9105 9/3 p.08 More ZX81/TS1000 Hi-Res Graphics requires extra hardware.

9105 9/3 p.09 Jack Dohany Public Notice Revised. Also list of current projects dated 910405.

9105 9/3 p.10 QL SuperBasic Tutorial Part 2 by Howard Clase St John's NFLD. Altering Programs; ASCII control codes; channels; saving paper by printing columns across the page. Dimensioning Arrays.

9105 9/3 p.15 Bug Alerts and Updates from Richard Hurd (TS2068). NEC 1035 Disk Drive Overview. Larken Disk Utility update. Copy Machine; LK2cpy; RDBKUP.

9105 9/3 p.16 Letter from Donald Lambert: Re SNUG Newsletter Editor; procedure for submitting input to SNUG.

9105 9/3 p.17 TS2068 Serial Cable. Hardware project.

9105 9/3 p.18 Scroll text in Window by Warren Fricke.

9105 9/3 p.19 More Keyboard Overlays: Tasword; Mscript; Artist II and a blank p.25 &

26.

9105 9/3 p.21 QLIPS. QL hardware design changes. Lots of explanations about QL problems.

9105 9/3 p.27 Interrupt Mode Summary by Bob Mitchell. Useful references given.

9105 9/3 p.30 QLIPS Stuff about Sinclair and Babbage.

9105 9/3 p.31 Printing strings to the SCREEN in different sizes. By Michael Di Rienzo.

9105 9/3 p.32 Quebec Link for QLers. Modem use. by Real Gagnon.

9105 9/3 p.33 TS2068: Entering and Recalling text in machine code by Dennis Jurries. Puts up to 277 characters into machine code and recovers them at will. Listing and Disassembly given.

9105 9/3 p.34 Notes from Hugh Howie. Proper use of USA ZIP codes and Canadian Postal Codes. Minerva: snags? Also on this page: EMSOFT ad re PSION MOBILE COMPUTER.

9107 9/4 p.4 Bob's Notebook. Toolkit Part 1. This is a summary of the contents of the utility package which originated in Your Computer back in 1985.

9107 9/4 p.6 QLIPS. Another column by Hugh Howie, this one about a tutorial on Superbasic.

9107 9/4 p.7 Timex Logic by Warren Fricke about the Logic Operator NOT.

9107 9/4 p.8 A letter from S. Gunhouse re sort routines: Indexed Binary and Binary Insertion for Tasword only.

9107 9/4 p.12 Minerva and others by L. Laferriere. For QL users.

9107 9/4 p.12 QL & 2068 users get hint on Canadian Postal Codes.

9107 9/4 p.13 Fixing my FDD3000 by James F. Brezina. Taken from CATUG Nite-Time News.

9107 9/4 p.15 Letter from George G. Cary re good service from Dohany and McMichael.

9107 9/4 p.17 Quick Directory Sorter by S. Gunhouse.

9107 9/4 p.18 Bob's Notebook Part 2 of Toolkit.

9107 9/4 p.20 Letter from S. Gunhouse re CIRCLE command complete with code.

9107 9/4 p.22 Microwave problem solved? by Hugh Howie; request for a BASIC listing for a railroad switching program.

9107 9/4 p.23 What Price Success? by Hugh Howie. Thoughts about the need to support the club(s) or they go under.

9107 9/4 p.24 Bob's Notebook. Character Set Editor. This allows complete sets to be rotated 1/4, 1/2 or 3/4 turn.

9107 9/4 p.25 PRINT USING tips by George Chambers.

9107 9/4 p.27 QL Primer by Ken Goods

9107 9/4 p.29 More Tasword II by Dick Wagner. Serves Aerco IF, A&J and Oliger/Hacksel.

9107 9/4 p.30 Mastering the MERGE command by Bob Mitchell in another page from Bob's Notebook.

9107 9/4 p.31 Disk Menu Loader by Keith Skapinski with refinements by George Chambers.

9107 9/4 p.32 Mike Di Rienzo provides some tips on using the Larken Disk System.

9107 9/4 p.34 Jeff Taylor provides a Software Review on Videotex v1.5. This will interest digitizer fans.

9109 9/5 p.4 Bob's Notebook Toolkit Part 3.

9109 9/5 p.6 Printer Interfaces and Driver Software: A primer by George Chambers.

9109 9/5 p.10 ZX81. A mystery program. Sounds suspiciously like an April Fool joke.

9109 9/5 p.11 TorQLib by Hugh Howie. Description of the new-style club library for QL users.

9109 9/5 p.12 Notes on the Dayton Computerfest 1991.

9109 9/5 p.14 Setting up LKDOS User-defined Commands. By Steven Gunhouse.

This is further to the article from Bob's Notebook in vol 9/3 about the NMI-F routine.

9109 9/5 p.16 ZX81 Scroll Clear. This will clear the screen quickly after scrolling the ZX81.

9109 9/5 p.17 Print Factory Graphics by John McMichael.

9109 9/5 p.18 QL Gold Card by Hugh Howie.

9109 9/5 p.20 Bob's Notebook Part 4. The final part of this summary of utilities in the best of 2068 toolkits.

9109 9/5 p.22 Ramblings by Hugh Howie (for QL users).

9109 9/5 p.23 Bob's Notebook: a rewrite of autoboot and graphix 24 programs used in Omnibus.

9109 9/5 p.25 Faster Slow Mode for the ZX81.

9109 9/5 p.26 One-Sided Disks Do Not Exist. By Hugh Howie.

9109 9/5 p.27 A digital clock for the TS2068 with two flaws: it doesn't keep good time and it crashes if the NMI button is used. Strictly for experimenters.

9109 9/5 p.28 Service charges for Sinclair Timex Computers revised May 1, 1991 by Dan Elliott of Cabool MO USA.

9109 9/5 p.30 QL overseas letters re exchange of newsletters.

9111 9/6 p.4 Bob's Notebook. What Do You Use Your Computer for, Eh?

9111 9/6 p.6 Printer Interfaces and Driver Software Part 2 by George Chambers.  
Some errors in Part 1 corrected.

9111 9/6 p.11 QLIPS by Hugh Howie. More on the Gold Card.

9111 9/6 p.12 ZX Resources--Transferring Files Between Computers by Rene Bruneau.

9111 9/6 p.13 SuperBasic Tutorial Part 3 (Part 4?) by Howard Clase St. John's Nfld.

9111 9/6 p.15 One-sided Disks Do Not Exist Part Two. By Gil Parish.

9111 9/6 p.16 Letter from Steven Gunhouse re Printer drivers. See page 6 in same issue.

9111 9/6 p.18 More on the 24-hour clock for TS2068 (from S. Gunhouse).

9111 9/6 p.19 More on the Gold Card for QLers. By M. Tomlinson and Hugh Howie.

9111 9/6 p.20 Discan. A Larken utility for TS2068 by Bob Mitchell that scans an entire disk for a given string of characters.

9111 9/6 p.22 The Montreal Renegade. Some notes on ancestor tracing. By Philip Hudsmith.

9111 9/6 p.24 QLIPS by Hugh Howie on removing a prefix from a string of titles.

9111 9/6 p.24 Omnibus error correction: applies to version 3.02g.

9111 9/6 p.25 Code transfer for ZX81 from Your Computer June 82.

9111 9/6 p.26 Kerning fonts in Pixel Print Professional by Bob Mitchell.

9111 9/6 p.28 QL "Quicky" DIR: Getting a directory quickly.

9111 9/6 p.29 Tape/Disk Save Routine; also error re "header.B1" on Omnibus Disk.

1992

9201 10/1 p.4 Bob's Notebook: A Tasword utility to emulate NLQ on a Fastext 80 printer.

9201 10/1 p.6 Printer Interfaces and Driver Software Part 3. By George Chambers,

9201 10/1 p.9 Laws of Computer Programming from the Aerco Instruction Tape.

9201 10/1 p.11 Network Gold Card and JSU ROM Compatible by Hugh Howie.

9201 10/1 p.12 Letter from Steven Gunhouse re "clock" and "interrupts".

9201 10/1 p.14 QL Tit-bits (sic) by Louis Laferriere. Minerva ROM replacement for QL; Text 87 and LAN with Trump Card.

9201 10/1 p.15 ZX81 Mystery program and ZX81 Scroll Clear.

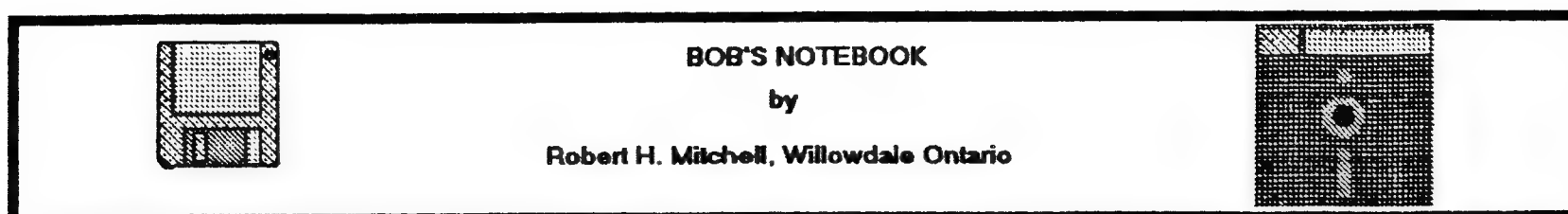
9201 10/1 p.16 One-sided disks: Open letter to Gil Parrish and Steven Gunhouse from Hugh Howie.

9201 10/1 p.16 TS2068 -- Timachine -- A fix by Ken Shoenberger which sends the Timachine printout to the wide printer with proper tabulation.

9201 10/1 p.18 TS2068 -- Larken NMI-F Key, another application by George Chambers.



9201 10/1 p.19 QLIPS Quickies by Hugh Howie: WSTAT command.  
9201 10/1 p.19 New Newsletter for the ZX81: initiated by Andre Baune of Chateauguay Quebec.  
9201 10/1 p.22 QL Toolkit II. Hugh Howie describes some of the things it can do.  
9201 10/1 p.23 Letter from Steven Gunhouse re Discan program described in vol 9/6 p.20; plus a revised "clock" routine.  
9201 10/1 p.27 Chatter from Hugh Howie reTorQLib program for QLers without expanded machine; 1440 disk drives and about Bill Jones.  
9201 10/1 p.27 ZX81 Faster Slow Mode. This is a repeat of copy given in vol 9/5.  
9203 10/2 p.3 Dead Key Row by Dick Wagner from Plotter newsletter. Repairing the TS2068 keyboard.  
9203 10/2 p.4 Bob's Newsletter. Transferring Files Between Computers.  
9203 10/2 p.6 Printer Interfaces and Driver Software Part 4 - Hacksel. By George Chambers.  
9203 10/2 p.8 Miracle Makes Gold Card Network. Recent JSU Problems Solved by Hugh Howie.  
9203 10/2 p.9 Graphics Screen\$ Dump for the Tandy DMP.105 by CATUG.  
9203 10/2 p.10 QLIPS Virus hits; QUANTA suffers from lack of material; Bill Jones drops out; Archive order problem; monitor cut-off at sides.  
9203 10/2 p.13 Using a mouse in the Kempston Port. By Mike Felerski.  
9203 10/2 p.14 Tape Doctor by Sebastien Boisvert. A review by Ron Campbell.  
9203 10/2 p.16 VideoFace by Romantic Robot Ltd. A hardware review via VISTA newsletter.  
9203 10/2 p.17 SMUG Digitizer Users: Info on modification allowing digitizer program to be used with TS2068.  
9203 10/2 p.17 Text 87 + 4. QLers take note.  
9203 10/2 p.18 Translation of QL programs by Louis Laferriere -- QL Shell and Newclick.  
9203 10/2 p.20 Tips re repairing the 2068 keyboard and Citizen 200GX printer for the QL/IBM, B&W or Colour  
9203 10/2 p.22 Modifications to SHREB--BP. A high -rez Graphics Utility for the ZX81.  
9203 10/2 p.24 Things to do with TK2 by Hugh Howie: Bare Bones 128 QL; Install CUMANA; Remove Cumana and install Trump Card; Change Defaults. WSTAT and STAT; DIR: DIR\SER; EXTRAS \SER; WDEL; VIEW; WREN; WCOPY; ALTKEY.  
9203 10/2 p.28 Letter from Steven Gunhouse commenting on George Chambers articles on Printer Drivers.  
9203 10/2 p.30 Family Trees by Hugh Howie. QL\_Genealogist is the name.  
9203 10/2 p.31 ZX91 Newsletter for the ZX81/TS1000.  
9203 10/2 p.36 QL Section of Toronto TS Users Club. Report on recent meeting and request to others interested in future meetings.  
9203 10/2 p.36 QUILL note on SAVE "Save Document?" dialogue query.  
9203 10/2 p.37 Vendor Listing and Newsletter and Information Exchange.



## SINC-LINK CONTENTS

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### 1990

9001 8/1 p.04 Bob's Notebook Tas>MS Loader converts TASWORD text to MSCRIPT. Programs are loader tas>ms.Bb and compiled code tas>ms.Bb. Later versions are tas2ms.Bb & tas2ms.Cc. This utility was subsequently superseded by Steven Gunhouse's machine code version: program names are Tas>MS.Bm and the codeTas>MS.CM.

9001 8/1 p.06 COLOUR COPY onto cloth by John McMichael.p.07 Add a BEEP to ZX81 keyboard key presses by Rene Bruneau. p.08 QLIPS static problems by H. Howie. p.09 Computer Repairs R Zannese p.09 LARKEN Printer driver for a serial port. By Larry Kenny.

9001 8/1 p.10 Microdrive Spotting. p.11 Networking with QL translated by L. Laferriere. p.13 Video Digitizer by J.McMichael. p.14 QL Section News by H. Howie p.15 TS1000 Video Driver Update to 8911 article by R. Bruneau.

9001 8/1 p.15 RLE file "Lovely Lady" download-ed by Jeff Taylor from TIBM Wizard BBS 416-743-7603. p.15 Wanted: One-liners. p.16 QL useful POKES. p.16 For Sale items by Zannese.

9001 8/1 p.17 Bob's Notebook playing with colour.

9001 8/1 p.18 MODEMs for MODERNs. Report on Nov 8 89 meeting at J. Taylor's. p.19 Turtle Graphics by Timothy Swenson. p.20 2068 Fix for Star NX-1000 using AERCO Centronics I/F. By Richard Hurd. Apparently no similar problem using Hacksell board.

9001 8/1 p.21 SINing and Filling on TS2068 by Joel Brody. Trig functions put to use. p.21 Confused about fonts? By Mike Felerski. Gives details on loading fonts and doing the necessary POKES. p.22 LARKEN RAMDISK at Kennedy Space Center by Les Cottrell p.22 DEF FN Command. How to use.

9001 8/1 p.23 Some add-ons available for 2068 are described: Weather Station Real Time Clock 32K RAM Expansion Chip Tester and Logic Monitor. ZEBU extra BASIC utilities. CADZ designing utility. PINS i/c pinout directory. CHIP i/c inventory program. Assembler TASWORD with 256K Aerco disk. OS DRAW for mdv and OS64. ZUNK Custom Electronics

9003 8/2 p.03 Bob's Notebook Header Reader Loader and BASIC for compilation p.14 Terminology using Pixel Print for the article.

9003 8/2 p.05 QL utility to change disk name .By Real Gagnon and provided by Louis Laferriere. p.06 QLIPS revised from last issue. By H. Howie. p.07 Penetrator 2068 game. Modification details for LARKEN. p.09 LEFT CENTRE and RIGHT Justification routines.

9003 8/2 p.10 MODEMs available from Telecom Canada (Bell). p.13 Spectrum Motherboard for use with TS1000 and TS2068 too.

9003 8/2 p.11 Printer Prose. By Lionel Keeping. Problems using a Tasman interface with LARKEN EPROM. p.12 Les Cottrell shows how to load TASWORD files into MSCRIPT and vice versa; how to save disk space when saving NMI SCREEN\$. Another use for NMI-F: PAUSE. Do not use OPEN\$4,"dd" when line0 contains m/c. Autoboot NMI-F loads any AUTOSTART in selected drive.

9003 8/2 p.15 MIDI on QL by Senen Racki. p.16 Other uses for RAMDISK. By Larry Crawford. Treatise on Bank Switching, running an AROS, etc. p.18 Trivial Pursuit game on 2068.p.19 Ads by LARKEN, SHARPS and Byte-Power.

- 9003 8/2 p.20 QLIPS by H.Howie. p.21 Videotex ad. p.22 SMUG Exposition Ad. p.23 TTSUC LARKEN Disk Library Listing.
- 9005 8/3 p.02 Editorial: membership extension on a one-time basis; all current memberships extended by six months. Tip re power supply generating RF which hampered disk operation on TOS system. Larken utility to read MSDOS disks and stores text in Mscript files. Use of Commodore mouse 1351 in Kempston joystick port. Note on Byte Power's Print Factory.
- 9005 8/3 p.04 Bob's Notebook on printing Timachine output onto wideprinter using LKDOS SEQ filing. Saving Profile text to a Seqfile. Using PROFILE to make address labels in elongated characters. Fixing a problem with TSTK Toolkit variables listing.
- 9005 8/3 p.05 Larken NMI-F AUTOSTART MENU Code is buried in Autostart program and loaded into LKDOS RAM using LDIR routine. Buried means using spare area 24311 up to 24989 or so. Code listing and disassembly given. This utility developed by George Chambers/Bob Mitchell.
- 9005 8/3 p.06 Scuttlebut by Hugh Howie. SMUG Computer Expo June 1-3. News of new laptop by Sir Clive. Cambridge North America going bankrupt? RMG Enterprises stops supporting Z88; only SHARPS left. Time Designs being resurrected?
- 9005 8/3 p.07 QLIPS by Hugh Howie. Clarification re QL not multi-tasking under TASKMASTER. This provided by EMSOFT (PeterHale) who offers help re QUILL.
- 9005 8/3 p.08 Transferring MSDOS text files to the TS2068 by George Chambers. Full details on how it was done and program listing.
- 9005 8/3 p.10 SMUG Video Digitizer. Using a camcorder etc to capture a TV screen onto the TS2068.
- 9005 8/3 p.11 Letter from Cameron Hayne on Timachine problems etc.
- 9005 8/3 p.12 The C Page by Timothy Swenson. Used with UNIX. For use with QL. QL Colour Demo. QL utility to switch between TV mode and Monitor mode.
- 9005 8/3 p.13 Family History and the ZX81 by Philip Hudsmith. For genealogy fans.
- 9005 8/3 p.15 RGB Monitors and TS2068. By George Chambers. Notes on Printer Ready checks for wide printer. By Louis Laferriere.
- 9005 8/3 p.16 Letter from Larry Kenny. Camtool discussed. Spell Checker and Desk Top Publisher still under development. Use of LKDOS DRAW command to do bar charts; clear partial screens; making backgrounds for title screens etc. DRAW also used as paintbrush. Use bank switching to switch programs. Plus other plans??
- 9005 8/3 p.16 QL\_DOC by Louis Laferriere. New ROM Minerva available from Real Gagnon Montreal.
- 9005 8/3 p.17 More QL news and hints from Hugh Howie. Networking tips. QLIPS: A friend in need in Texas Circles: a small QL listing.
- 9005 8/3 p.18 Bob's Notebook: Bank Switching. A beginner's view of this complex aspect of TS2068 programming.
- 9005 8/3 p.19 Letter from Steven Gunhouse. Topics include: Justifying text; Opening Larken extra channels; Bank-switching thoughts; Finding a string in memory.
- 9005 8/3 p.23 Call for Inputs. ZX Appeal Sinclair Computers User Society Quantum Levels ISTUG Harrisburg Area TSUG. The Plotter. SMUG. All this from Hugh Howie.
- 9005 8/3 p.25 Mike's Notebook by Michael J. DiRienzo. MACRO a program to use the M2 Mode to make Function Keys. Cross Ref to Sinc-Link 85/09 p.06
- 9005 8/3 p.26 Tech Draw Jr. and Larken by George Chambers. Saving Screens to Disk Listing and disassembly.
- 9005 8/3 p.28 QLIPS by H.Howie More Networking items. Problems with QUILL. Need for extra memory.
- 9005 8/3 p.29 Videotex Digitizer Software Review. with pictures.
- 9005 8/3 p.30 Description of Wordmaster from ZXAPPEAL. My personal note Wordmaster will not work with any printer that does not provide left margin adjust or printer reset commands. (RHM)
- 9005 8/3 p.31 Minix on the QL by T. Swenson. A Unix like operating system.
- 9005 8/3 p.32 LKDOS input from Bill Jones. Using LKDOS PRINT with <A\$files> Simulating NMI autoloads. Saving an AUTOLOAD program. What to include in an autoload program.
- 9005 8/3 p.33 Pixel Printing page. Sinclair Desktop Publishing Journal. by Mike Fellerski. Also news from Byte Power's Print Factory.
- 9007 8/4 p.03 Bob's Notebook: Bank Balances: a listing.
- 9007 8/4 p.05 QL Try-It by H. Howie. disappearing cursor and dump to printer.
- 9007 8/4 p.06 File name misconceptions for the QL. Basic Filenames. Psion Filenames. More Psion Tricks.
- 9007 8/4 p.08 Letter from S. Gunhouse Math stuff re DEF FN and use of VAL and VAL\$.

- 9007 8/4 p.10 Wordmaster: A review. By Lionel Keeping. File Handling File Options Command Lines Graphic Printing Headers and Footers Print Options
- 9007 8/4 p.13 File Header Reader for Larken TS2068 by George Chambers. Full details and listing. Correction re Ramdisk from Larry Crawford re AROS. Mod to Pixel Print from Andrew Zettel. Icon Library info for Pixel Print Plus and Professional.
- 9007 8/4 p.15 ICON Library Manager User Guide.
- 9007 8/4 p.16 Improving the TS1000 by Rene Bruneau. Basic Mods. Memory and Display Peripheral Devices.
- 9007 8/4 p.17 The C Page by Tim Swenson. A short program.
- 9007 8/4 p.18 The QL Library continues to grow. From H Howie the librarian. QL News Chaos Buster by Louis Laferriere. Random Blocks: a tip for QL with a listing. CQ QL SOS. Problem from Robin Beaumont Yellowknife.
- 9007 8/4 p.20 Letter from S. Gunhouse. TAS>MS converter. By my test, this works very well. (RHM). Source Code provided and DATA lines of machine code. Fastext 80: getting NLQ really cheap.
- 9007 8/4 p.23 TS2068 ROM Disassembly: How it can be done. by Bob Mitchell.
- 9007 8/4 p.26 PIE Charts and Machine SCREEN Dumps by Warren Fricke
- 9009 8/5 p.03 Bob's Notebook Making Graphs with Larken LKDOS Version 3. Pixel Print Professional used for page.
- 9009 8/5 p.04 PSI CHESS AND LARKEN By George Chambers How to convert this tape program to disk.
- 9009 8/5 p.06 Q LIPS Bits and Pieces Write Protect Tabs Removable Disk Labels. Disk drive problems. Missing QLs. Update slow delivery. New software in club library.
- 9009 8/5 p.07 ZX81 tape library by George Chambers. Utilities to overcome tape loading problems and to copy a tape that starts running after the load is complete.
- 9009 8/5 p.08 Former Cambridge Salesman tries database for mail orders: Nigel Searle's company is The Marketing Clinic. Hints and Tips on QLs by E.P.Wannum. SCREEN saving; DIR command.
- 9009 8/5 p.09 QUILL and Toolkit\_2 by Hugh Howie. Loading problems.
- 9009 8/5 p.09 ZX81 Multiplication Accuracy by George Chambers Also: Printer Ink source.
- 9009 8/5 p.10 Plotting Charts and Curves by Warren Fricke.
- 9009 8/5 p.11 Multiplication by George Chambers. Russian Peasant Multiplication.
- 9009 8/5 p.12 Imagix by Emanuel Verbeeck. Gives superior but slow graphic images.
- 9009 8/5 p.14 The Print Factory: a review by Jeff Taylor. Available from Byte Power.
- 9009 8/5 p.15 Cumana Interface by Louis Laferriere. Problem and repair details.
- 9009 8/5 p.16 Larken Disk Editor A review by Les Cottrell done on PPP (Pixel Print Professional).
- 9009 8/5 p.17 Keyboard Interface for TS1000 & TS2068 by Rene Bruneau. Full details on how to add an external keyboard. Hardware project with drawings.
- 9009 8/5 p.20 Quebec Link for QL users by Real Gagnon. TS2068 section, then QL Public Domain & Shareware. Clive strikes back. QL programming tip. Tetris for QL.
- 9009 8/5 p.21 The C Page by Timothy Swenson. Input/Output in C. Reverse side on p.22 very poorly printed.
- 9009 8/5 p.23 Bob's Notebook 900708 LKDOS Printer exercise. Lubrication and ribbon re-inking
- 9009 8/5 p.24 Chaos Game by Bob Warner.
- 9009 8/5 p.25 TS2068 Morse Code Generator by Steven Gunhouse. Directory to Printer for QL. By Butch Weinberg.
- 9009 8/5 p.26 Phone inventor never dreamed of ALEX. Copied from Toronto Star.
- 9011 8/6 p.02 How to read/print a Help file. By G. Chambers. Correction to PCB layout for Keyboard Interface in last month's issue.
- 9011 8/6 p.03 Z80 Dictionary of Instructions based on Toni Baker's book for ZX81. By Bob Mitchell via PPP.
- 9011 8/6 p.07 QL Library report for 1990 by H. Howie.
- 9011 8/6 p.08 Q LIPS by Hugh Howie. Need for course on Super Basic programming. More from the QL Library. Changing Disk Name.
- 9011 8/6 p.09 The C Page from last month reprinted for better clarity.
- 9011 8/6 p.11 Larken Maxcom: A review by Greg Popovich. BBS section gets rave from writer.
- 9011 8/6 p.13 text87: a review by Hugh Howie.
- 9011 8/6 p.15 How to save NMI-type files from disk to tape. By Steven Gunhouse.
- 9011 8/6 p.18 Some graphics done via PPP using fonts from Wordmaster. Problems using Fastext 80 with Wordmaster.
- 9011 8/6 p.19 Hints for Timex/Sinclair users by G.A.Smith taken from Computer Shopper Sep 88.



9011 8/6 p.21 BBS Software by Larken Sir Clive's Castle BBS. Ottawa Ont (613) 835-2680 Sysop Michael Dove  
 Hardware David Solly SIGs/Library Pascal Programming SIG.  
 9011 8/6 p.23 Quebec Link. By Real Gagnon. Default device on QL. QL Tip: loading machine code. CSIZE  
 special effects.  
 9011 8/6 p.24 JSU SCREEN modes by Howard Clase. QL info.  
 9011 8/6 p.25 Keyboard Overlays. By Les Cottrell. PPP still alive: Mike Felerski's Desktop Publishing Journal  
 will appear in Update.  
 9011 8/6 p.27 Game review: King's Keep by Jeff Taylor.  
 9011 8/6 p.28 The C Page by Timothy Swenson. Accessing files.  
 9011 8/6 p.29 QL notes from Hugh Howie.  
 9011 8/6 p.30 QL Hardware Library by Howie.  
 9011 8/6 p.31 Service Charges for Sinclair Timex computer eff Jan 1991. Where to get supplies.

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9101 9/1 P.04 Bob's Notebook Odds & Ends Disk name garbage Check printer ready Printing a pound sign  
 Bug Alert! LK2CPY.B1 (R. Hurd) Bug Alert! INDEX.B1 (Mitchell)  
 9101 9/1 P.06 November 90 meeting of QL wing. Demos on Chaos Buster, Networking, text87, IMAGIX,  
 Modifying and cleaning up archives files. Report by Louis Laferriere.  
 9101 9/1 P.07 Changing Tasword II Help Page by Dick Wagner. Detailed steps given of this and cross  
 reference to a Time Designs method in Vol3 No 2 pages 26-29.  
 9101 9/1 P.08 Data Read Restore on TS1000 by Sebastien Boivert.  
 9101 9/1 P.10 Software Review: PIX-FX by Chuck Kereluck. Graphics program by Michael DiRienzo for  
 TS2068. Available from VectorWare4128-1/2 California Ave SW Seattle WA 98116 for US\$20  
 9101 9/1 P.12 QL programming tips by Howard Clase NFLD. Structured Programming -Clase's Rules.  
 9101 9/1 P.15 Power Glitches by H. Howie. Crash problems with QL.  
 9101 9/1 P.16 LKDOS utility--print a CATalogue by Thomas Skapinski. Added cautionary note by Geo.  
 Chambers.  
 9101 9/1 P.18 text87 My Latest Impression by Hugh Howie. A further review of this QL word processor.  
 9101 9/1 P.19 Steven Gunhouse comments on the mathematical routines printed in the Sep/Oct 90 Sinc-Link.  
 9101 9/1 P.21 Sincus Light Pen for TS2068 by Wes Brzozowski. A hardware project for Graphics buffs.  
 9101 9/1 P.23 Digitizer problem. Notes from Marty Miller.  
 9101 9/1 P.24 The C Page by Timothy Swenson. A version of the UNIX utility wc (word count) which reads in a  
 text file and counts lines, words and characters.  
 9101 9/1 P.25 Timex Sinclair Resources by Rene Bruneau who is assembling a binder with many ZX 81  
 articles collected over the past 5 to 6 years. Many are hardware oriented and some apply to the TS2068 also.  
 Tip on Static Electricity around your computer.  
 9101 9/1 P.26 Stepping Rate Fix for LKDOS. By Bob Swoger of Chicago Area Timex UG. Listing provided with  
 mod by George Chambers.  
 9101 9/1 P.27 Mike Di Rienzo's notebook A lotto number generator for the TS2068.  
 9101 9/1 P.28 Les Cottrell provides a review of Byte-Power's Disk Utility Software: various COPY routines,  
 coloured disk names, name thief transfers a disk name from one disk to another, Hellol a very useful boot  
 utility especially when installed in Ramdisk, Tiny Boot, Format disk which maps out bad blocks, sort catalogue,  
 clean up disks, block analyzer, fast disk clean up and a file analyzer.  
 9101 9/1 P.29 More MIDI for the 2068 by Richard Hurd. MIDI Interface, recap, alternatives and sequencing  
 Synthesizers.  
 9101 9/1 P.31 ZX81 Lottery Fun by Mel Richardson. A listing to type in.  
 9101 9/1 P.32 Quebec Link QL notes from Real Gagnon.  
 9101 9/1 P.33 QL Hardware notes from Hugh Howie. Also SuperBasic Instruction.  
 9101 9/1 P.34 PIX FIX review by Chuck Kereluck Do not confuse with PIX FX. This one creates graphics while  
 PIX FX manipulates them.  
 9101 9/1 P.36 Character Set Editor by Bob Mitchell. This allows entire sets to be rotated as well as defined.  
 Listing given for reader to enter.  
 9101 9/1 P.41 Three keyboard overlays: HOT Z, Profile Plus 5A, Pixel Print Professional.

9101 9/1 P.44 Software Review by Jeff Taylor COLOR 2 GREY changes a SCREEN\$ to a grey scale for better printing on the wide printer. Good example shown.

9101 9/1 P.45 A new computer use from SMUG.

9101 9/1 P.46 Archive Files (QL) by H. Howie How to rename or change or add a field.

9101 9/1 P.47 More RESPRing from Howard Clase in Nfld. This for QL wing.

9101 9/1 P.48 Letter from Steven Gunhouse with a Tasword text compressor.

9103 9/2 p.04 Demographic map of NorthAmerica showing concentration of TTSUC members as of Sep 90. prepared by Hugh Howie..

9103 9/2 p.05 Bob's Notebook. slink and slink2 Profile files kept current and passed to club library; slink is short for Sinc-Link Newsletter; the two volumes act as an index of key articles. Users can add to them if not enough detail is shown. Profile changes to allow left & right column printouts; also CAT and Fullcat incorporated. Interaction between files can cause problems.

9103 9/2 p.07 QLIPS by Hugh Howie. Hacking much more difficult than on 2068 or ZX81. Some drawbacks and advantages over PCs given by Bill Cable.

9103 9/2 p.08 Disk Menu Maker by Larry Crawford based on earlier menu by George Chambers and Bob Mitchell. This is the listing only. See p.20 for the details.

9103 9/2 p.09 ZX81 games notes by Ron Campbell

9103 9/2 p.10 Letter from Steven Gunhouse. A complex method of packing telephone numbers into fewer bytes.

9103 9/2 p.12 The Quebec Link by Real Gagnon. Calling an external machine code routine to complement the Archive programming language.

9103 9/2 p.14 Mike's Notebook. A routine to compress a SCREEN\$. Very efficient at reducing byte length to below 5k. Decode routine is saved with each compressed SCREEN\$ to make reloading simpler.

9103 9/2 p.15 QL Meanderings and One-liners by Hugh Howie.

9103 9/2 p.16 Software Review--Omnicalc. A spreadsheet alternative to Vu-Calc. Drawback is that no LKDOS load and save routines built in. However, NMI save comes to the rescue. Benefit is that larger numbers can be accommodated than in Vu-Calc. Many other good features make this a good buy.

9103 9/2 p.18 TS2068 Computer Repairs. Much needed info on a reliable repair shop.

9103 9/2 p.19 ZX81 -- TS1000 news by Jeff Taylor. High Resolution pictures.

9103 9/2 p.20 2068 Larken Disk Menu Maker by Larry Crawford. Full details for the listing on p.08 in this newsletter. Finding the active drive. Adding Taswide. Getting rid of unnecessary lines Autostart Save. Finding the Disk Name. Data Statements. Operation. Using the Menu Maker. Using the Disk Menu.

9103 9/2 p.21 Line Delete for Spectrum. If you program in Spectrum, this is a time-saver.

9103 9/2 p.22 QL: Some popular misconceptions. BASIC Filenames. Psion Filenames More Psion tricks. All this from Howard Clase

9103 9/2 p.24 ZX Resources by Rene Bruneau. A parallel interface using theZ80 PIO chip by Zilog. Hardware project with diagrams.

9103 9/2 p.27 ZX81/TS1000 Printer tip How to COPY a block of lines onto the printer. Also the listings for the DATAREAD RESTORE feature for theTS1000. See 9101 9/1 p.08 for the article. All this from Sebastien Boisvert

9103 9/2 p.28 TOS System repair. TOS = Timex Operating System; also known as the ZEBRA DISK system. Jack Dohany is source for the PLA chip used in this system. PLA = Programmable Logic Array.

9103 9/2 p.29 How to Squish a Disk. Details on the simple procedure for defragmenting a disk are given. Wordmaster tip on this page which helps save disk space.

9103 9/2 p.30 QL -- LAN or Local Area Network. by Hugh Howie. LAN = Networking in QLingo. Also an article on Format to 894/900 sectors.

9103 9/2 p.31 Letter from Steven Gunhouse. Correcting error in Swoger's article on changing stepping rate of drives. A routine to get BIT 3 of a byte when checking printer ready status. Clean Screen tip from Steve Dempster to prevent a loading message from spoiling the SCREEN\$ display.

9103 9/2 p.34 Imagedit. A way to combine two SCREEN\$ in one. Listing from Your Computing Apr 1985 p.135. Also, Alfa-Bytes News #1: a list of mnemonics (?) you may never have seen.

9105 9/3 p.04 Bob's Notebook Programming Tips Alternate to NMI button plus FKey. Plus: Profile warning; Printer Control Codes; Keyboard Idiosyncrasies.

9105 9/3 p.06 Software release from Wood and Wind Computing. For QL: QLERK a powerful accounting program. \$75.00 for 2 disks. Archive based. Bill Cable Cornish NH USA

9105 9/3 p.07 QLIPS: getting rid of garbage. By Hugh Howie. List1 and List2 explained. Turtle Graphics.  
 9105 9/3 p.08 More ZX81/TS1000 Hi-Res Graphics requires extra hardware.  
 9105 9/3 p.09 Jack Dohany Public Notice Revised. Also list of current projects dated 910405.  
 9105 9/3 p.10 QL SuperBasic Tutorial Part 2 by Howard Clase St John's NFLD. Altering Programs; ASCII control codes; channels; saving paper by printing columns across the page. Dimensioning Arrays.  
 9105 9/3 p.15 Bug Alerts and Updates from Richard Hurd (TS2068). NEC 1035 Disk Drive Overview. Larken Disk Utility update. Copy Machine; LK2cpy; RDBKUP.  
 9105 9/3 p.16 Letter from Donald Lambert: Re SNUG Newsletter Editor; procedure for submitting input to SNUG.  
 9105 9/3 p.17 TS2068 Serial Cable. Hardware project.  
 9105 9/3 p.18 Scroll text in Window by Warren Fricke.  
 9105 9/3 p.19 More Keyboard Overlays: Tasword; Mscript; Artist II and a blank p.25 & 26.  
 9105 9/3 p.21 QLIPS. QL hardware design changes. Lots of explanations about QL problems.  
 9105 9/3 p.27 Interrupt Mode Summary by Bob Mitchell. Useful references given.  
 9105 9/3 p.30 QLIPS Stuff about Sinclair and Babbage.  
 9105 9/3 p.31 Printing strings to the SCREEN in different sizes. By Michael Di Rienzo.  
 9105 9/3 p.32 Quebec Link for QLers. Modem use. by Real Gagnon.  
 9105 9/3 p.33 TS2068: Entering and Recalling text in machine code by Dennis Jurries. Puts up to 277 characters into machine code and recovers them at will. Listing and Disassembly given.  
 9105 9/3 p.34 Notes from Hugh Howie. Proper use of USA ZIP codes and Canadian Postal Codes. Minerva: snags? Also on this page: EMSOFT ad re PSION MOBILE COMPUTER.  
 9107 9/4 p.4 Bob's Notebook. Toolkit Part 1. This is a summary of the contents of the utility package which originated in Your Computer back in 1985.  
 9107 9/4 p.6 QLIPS. Another column by Hugh Howie, this one about a tutorial on Superbasic.  
 9107 9/4 p.7 Timex Logic by Warren Fricke about the Logic Operator NOT.  
 9107 9/4 p.8 A letter from S. Gunhouse re sort routines: Indexed Binary and Binary Insertion for Tasword only.  
 9107 9/4 p.12 Minerva and others by L. Laferriere. For QL users.  
 9107 9/4 p.12 QL & 2068 users get hint on Canadian Postal Codes.  
 9107 9/4 p.13 Fixing my FDD3000 by James F. Brezina. Taken from CATUG Nite-Time News.  
 9107 9/4 p.15 Letter from George G. Cary re good service from Dohany and McMichael.  
 9107 9/4 p.17 Quick Directory Sorter by S. Gunhouse.  
 9107 9/4 p.18 Bob's Notebook Part 2 of Toolkit.  
 9107 9/4 p.20 Letter from S. Gunhouse re CIRCLE command complete with code.  
 9107 9/4 p.22 Microwave problem solved? by Hugh Howie; request for a BASIC listing for a railroad switching program.  
 9107 9/4 p.23 What Price Success? by Hugh Howie. Thoughts about the need to support the club(s) or they go under.  
 9107 9/4 p.24 Bob's Notebook. Character Set Editor. This allows complete sets to be rotated 1/4, 1/2 or 3/4 turn.  
 9107 9/4 p.25 PRINT USING tips by George Chambers  
 9107 9/4 p.27 QL Primer by Ken Goods  
 9107 9/4 p.29 More Tasword II by Dick Wagner. Serves Aerco IF, A&J and Oliger/Hacksel.  
 9107 9/4 p.30 Mastering the MERGE command by Bob Mitchell in another page from Bob's Notebook.  
 9107 9/4 p.31 Disk Menu Loader by Keith Skapinski with refinements by George Chambers.  
 9107 9/4 p.32 Mike Di Rienzo provides some tips on using the Larken Disk System.  
 9107 9/4 p.34 Jeff Taylor provides a Software Review on Videotex v1.5. This will interest digitizer fans.  
 9109 9/5 p.4 Bob's Notebook Toolkit Part 3.  
 9109 9/5 p.6 Printer Interfaces and Driver Software: A primer by George Chambers.  
 9109 9/5 p.10 ZX81. A mystery program. Sounds suspiciously like an April Fool joke.  
 9109 9/5 p.11 TorQLib by Hugh Howie. Description of the new-style club library for QL users.  
 9109 9/5 p.12 Notes on the Dayton Computerfest 1991.  
 9109 9/5 p.14 Setting up LKDOS User-defined Commands. By Steven Gunhouse.  
 This is further to the article from Bob's Notebook in vol 9/3 about the NMI-F routine.  
 9109 9/5 p.16 ZX81 Scroll Clear. This will clear the screen quickly after scrolling the ZX81.  
 9109 9/5 p.17 Print Factory Graphics by John McMichael.

- 9109 9/5 p.18 QL Gold Card by Hugh Howie.  
 9109 9/5 p.20 Bob's Notebook Part 4. The final part of this summary of utilities in the best of 2068 toolkits.  
 9109 9/5 p.22 Ramblings by Hugh Howie (for QL users).  
 9109 9/5 p.23 Bob's Notebook: a rewrite of autoboot and graphix 24 programs used in Omnibus.  
 9109 9/5 p.25 Faster Slow Mode for the ZX81.  
 9109 9/5 p.26 One-Sided Disks Do Not Exist. By Hugh Howie.  
 9109 9/5 p.27 A digital clock for the TS2068 with two flaws: it doesn't keep good time and it crashes if the NMI button is used. Strictly for experimenters.  
 9109 9/5 p.28 Service charges for Sinclair Timex Computers revised May 1, 1991 by Dan Elliott of Cabool MO USA.  
 9109 9/5 p.30 QL overseas letters re exchange of newsletters.  
 9111 9/6 p.4 Bob's Notebook. What Do You Use Your Computer for, Eh?  
 9111 9/6 p.6 Printer Interfaces and Driver Software Part 2 by George Chambers. Some errors in Part 1 corrected.  
 9111 9/6 p.11 QLIPS by Hugh Howie. More on the Gold Card.  
 9111 9/6 p.12 ZX Resources--Transferring Files Between Computers by Rene Bruneau.  
 9111 9/6 p.13 SuperBasic Tutorial Part 3 (Part 4?) by Howard Clase St. John's Nfld.  
 9111 9/6 p.15 One-sided Disks Do Not Exist Part Two. By Gil Parish.  
 9111 9/6 p.16 Letter from Steven Gunhouse re Printer drivers. See page 6 in same issue.  
 9111 9/6 p.18 More on the 24-hour clock for TS2068 (from S. Gunhouse).  
 9111 9/6 p.19 More on the Gold Card for QLers. By M. Tomlinson and Hugh Howie.  
 9111 9/6 p.20 Discan. A Larken utility for TS2068 by Bob Mitchell that scans an entire disk for a given string of characters.  
 9111 9/6 p.22 The Montreal Renegade. Some notes on ancestor tracing. By Philip Hudsmith.  
 9111 9/6 p.24 QLIPS by Hugh Howie on removing a prefix from a string of titles.  
 9111 9/6 p.24 Omnibus error correction: applies to version 3.02g.  
 9111 9/6 p.25 Code transfer for ZX81 from Your Computer June 82.  
 9111 9/6 p.26 Kerning fonts in Pixel Print Professional by Bob Mitchell.  
 9111 9/6 p.28 QL "Quickly" DIR. Getting a directory quickly.  
 9111 9/6 p.29 Tape/Disk Save Routine; also error re "header.B1" on Omnibus Disk.

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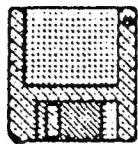
- 9201 10/1 p.4 Bob's Notebook: A Tasword utility to emulate NLQ on a Fastext 80 printer.  
 9201 10/1 p.6 Printer Interfaces and Driver Software Part 3. By George Chambers.  
 9201 10/1 p.9 Laws of Computer Programming from the Aerco Instruction Tape.  
 9201 10/1 p.11 Network Gold Card and JSU ROM Compatible by Hugh Howie.  
 9201 10/1 p.12 Letter from Steven Gunhouse re "clock" and "interrupts".  
 9201 10/1 p.14 QL Tit-bits (sic) by Louis Laferriere. Minerva ROM replacement for QL; Text 87 and LAN with Trump Card.  
 9201 10/1 p.15 ZX81 Mystery program and ZX81 Scroll Clear.  
 9201 10/1 p.16 One-sided disks: Open letter to Gil Parrish and Steven Gunhouse from Hugh Howie.  
 9201 10/1 p.16 TS2068 -- Timachine -- A fix by Ken Shoenberger which sends the Timachine printout to the wide printer with proper tabulation.  
 9201 10/1 p.18 TS2068 -- Larken NMI-F Key. another application by George Chambers.  
 9201 10/1 p.19 QLIPS Quickies by Hugh Howie: WSTAT command.  
 9201 10/1 p.19 New Newsletter for the ZX81: initiated by Andre Baune of Chateauguay Quebec.  
 9201 10/1 p.22 QL Toolkit II. Hugh Howie describes some of the things it can do.  
 9201 10/1 p.23 Letter from Steven Gunhouse re Discan program described in vol 9/6 p.20; plus a revised "clock" routine.  
 9201 10/1 p.27 Chatter from Hugh Howie reTorQLib program for QLers without expanded machine; 1440 disk drives and about Bill Jones.  
 9201 10/1 p.27 ZX81 Faster Slow Mode. This is a repeat of copy given in vol 9/5.  
 9203 10/2 p.3 Dead Key Row by Dick Wagner from Plotter newsletter. Repairing the TS2068 keyboard.  
 9203 10/2 p.4 Bob's Newsletter. Transferring Files Between Computers.



9203 10/2 p.6 Printer Interfaces and Driver Software Part 4 - Hacksel. By George Chambers.  
 9203 10/2 p.8 Miracle Makes Gold Card Network. Recent JSU Problems Solved by Hugh Howie.  
 9203 10/2 p.9 Graphics Screen\$ Dump for the Tandy DMP.105 by CATUG.  
 9203 10/2 p.10 QLIPS Virus hits; QUANTA suffers from lack of material; Bill Jones drops out; Archive order problem; monitor cut-off at sides.  
 9203 10/2 p.13 Using a mouse in the Kempston Port. By Mike Felerski.  
 9203 10/2 p.14 Tape Doctor by Sebastien Boisvert. A review by Ron Campbell.  
 9203 10/2 p.16 VideoFace by Romantic Robot Ltd. A hardware review via VISTA newsletter.  
 9203 10/2 p.17 SMUG.Digitizer Users: Info on modification allowing digitizer program to be used with TS2068.  
 9203 10/2 p.17 Text 87 + 4. QLers take note.  
 9203 10/2 p.18 Translation of QL programs by Louis Laferriere -- QL Shell and Newclick.  
 9203 10/2 p.20 Tips re repairing the 2068 keyboard and Citizen 200GX printer for the QL/IBM, B&W or Colour  
 9203 10/2 p.22 Modifications to SHREB--BP. A high -rez Graphics Utility for the ZX81.  
 9203 10/2 p.24 Things to do with TK2 by Hugh Howie: Bare Bones 128 QL; Install CUMANA; Remove Cumana and install Trump Card; Change Defaults. WSTAT and STAT; DIR: DIRSER; EXTRAS \SER; WDEL; VIEW; WREN; WCOPY; ALTKEY.  
 9203 10/2 p.28 Letter from Steven Gunhouse commenting on George Chambers articles on Printer Drivers.  
 9203 10/2 p.30 Family Trees by Hugh Howie. QL\_Genealogist is the name.  
 9203 10/2 p.31 ZX91 Newsletter for the ZX81/TS1000.  
 9203 10/2 p.36 QL Section of Toronto TS Users Club. Report on recent meeting and request to others interested in future meetings.  
 9203 10/2 p.36 QUILL note on SAVE "Save Document?" dialogue query.  
 9203 10/2 p.37 Vendor Listing and Newsletter and Information Exchange

End of last part of 3 parts.

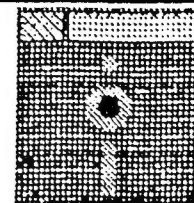
This file, comprising 17 pages, can be provided on an IBM compatible disk in Word Perfect 5.1 format or straight text format. It could be downloaded to a TS 2068 on request.  
 Bob Mitchell 920307.



## BOB'S NOTEBOOK

by

Robert H. Mitchell, Willowdale Ontario



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need to add 10/3 and 10/4 v

break  
between  
issues

2068/2050 → IBM